

AMENDED CLAIMS

[received by the International Bureau on 17 December 2004 (17.12.2004);
original claims 1-9 replaced by new claims 1-10 (2 pages)]

1. A loudspeaker provided with a frame (1), a membrane (3) and a drive unit (5), the membrane having a substantially flat outer circumferential edge suspended from the frame, and a substantially flat inner circumferential edge, the drive unit having a stationary part secured to the frame and provided with a magnet system, and a translatable part provided with a coil support secured to the substantially flat inner circumferential edge of the membrane and comprising an electric coil, wherein the membrane includes a membrane body (4), which, viewed in a circumferential direction, has a pattern of folds (4c) radially extending between the substantially flat inner circumferential edge and the substantially flat outer circumferential edge of the membrane, which folds have a depth, measured from the membrane body, which smoothly decreases towards the substantially flat outer circumferential edge of the membrane.
2. A loudspeaker as claimed in claim 1, wherein the membrane body is a concave body, the substantially flat inner circumferential edge and the substantially flat outer circumferential edge being in parallel planes.
3. A loudspeaker as claimed in claim 1, wherein the membrane body is, in principle, a flat body, the substantially flat inner circumferential edge and the substantially flat outer circumferential edge being in substantially coinciding planes.
4. A loudspeaker as claimed in claim 1, wherein the substantially flat inner circumferential edge of the membrane is adhered to the coil support of the translatable part of the drive unit.
5. A loudspeaker as claimed in claim 1, wherein the depth of the folds smoothly decreases towards the substantially flat inner circumferential edge of the membrane.

6. A loudspeaker as claimed in claim 1, wherein the membrane edge has an inner portion adjoining the substantially flat inner circumferential edge of the membrane, which portion recedes, viewed from the magnet system.
- 5 7. A loudspeaker as claimed in claim 1, wherein the pattern of folds is a non-uniform pattern, viewed in a circumferential and/or radial direction.
8. A membrane intended for use in a loudspeaker, including a membrane body, which, viewed in a circumferential direction, has a pattern of folds radially extending
10 between a flat inner circumferential edge and a flat outer circumferential edge, wherein the folds have a depth, measured from the membrane body, which smoothly decreases towards the flat outer circumferential edge.
9. A membrane as claimed in claim 8, wherein the depth of the folds smoothly
15 decreases towards the flat inner circumferential edge.
10. Use of the membrane as claimed in claim 8 or 9 in a loudspeaker.